IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (Currently Amended): A method of driving a display apparatus, the display apparatus including:

a first substrate having a first surface;

electron emitting elements, each configured to emit an electron beam, which are arranged on the first surface of the first substrate in a matrix form;

a second substrate having a second surface which faces the first surface with a gap therebetween;

an anode electrode formed at the second surface, and

a phosphor layer formed on the anode electrode, and configured to emit light rays in response to irradiation of the electron beam;

said display method comprising:

selecting a first combination of a first anode voltage and a first element voltage;

applying the first anode voltage to the anode electrode during a first period and applying the first element voltage to the electron emitting elements selectively during the first period;

changing the first combination to a second combination of a second anode voltage and a second element voltage;

applying the second anode voltage to the anode electrode during a second period and applying the second element voltage to the electron emitting elements selectively during the second period; [[and]]

changing the second combination to the first combination after the second period; and

wherein the first and second periods are determined based on the first and second combinations respectively and are inverse proportional to an anode current flowing through the anode.

Claim 2 (Currently Amended): A method according to claim 1, wherein each of the electron emitting elements includes an element film and first and second electrodes opposing each other and disposed on the element film.

Claim 3 (Original): A method according to claim 1, wherein the display apparatus further includes:

a plurality of scanning lines arranged parallel to each other on the first surface of the first substrate;

a plurality of modulation lines which intersect the scanning lines so as to be electrically insulated therefrom and are arranged parallel to each other, the electron emitting elements being provided at intersections of the scanning lines and the modulation lines, and the first and second electrodes being respectively connected to the scanning line and the modulation line.

Claim 4 (Original): A method according to claim 3, wherein

said display method further comprising:

generating a first scanning and modulating signal including the first element voltage, and generating a second scanning and modulating signal including the second element voltage:

supplying the first scanning and modulating signal to the scanning and modulation lines respectively, during the first period; and

supplying the second scanning and modulating signal to the scanning and modulation lines respectively, during the second period.

Claim 5 (Currently Amended): A method according to claim 4, further comprising inputting a display signal to generate the first and second scanning and modulation signals, wherein the first and second combinations are so set as to provide a substantially same luminance display condition with respect to the same display signal.

Claim 6 (Original): A method according to claim 1, wherein changing the first combination includes switching a first power supply to a second power supply to generate the second combination.

Claim 7 (Original): A method according to claim 1, wherein changing the second combination includes switching a second power supply to a first power supply to generate the first combination.

Claim 8 (Canceled).

Claim 9 (Original): A method according to claim 1, wherein changing the first combination includes gradually changing the first anode voltage to the second anode voltage, and the first element voltage to the second voltage, and changing the second combination

includes gradually changing the second anode voltage to the first anode voltage, and the second element voltage to the first voltage.

Claim 10 (Original): A method according to claim 1, wherein changing the first combination includes applying an intermediate anode voltage between the first and second anode voltages to the anode and applying an intermediate element voltage between the first and second element voltages to the electron emitting element during an third period after the first period, and changing the second combination includes applying the intermediate anode voltage between the first and second anode voltages to the anode and applying the intermediate element voltage between the first and second element voltages to the electron emitting element during the fourth period after the second period.

Claim 11 (Original): A method according to claim 1, wherein the first and second combinations cause the electron beams to be landed on first and second positions on the phosphor layer, respectively.

Claim 12 (Currently Amended): A system for driving a display apparatus, comprising:

a first substrate having a first surface;

electron emitting elements, each configured to emit an electron beam, which are arranged on the first surface of the first substrate in a matrix form;

a second substrate having a second surface which faces the first surface with a gap therebetween;

an anode electrode formed at the second surface, and

a phosphor layer formed on the anode electrode and configured to emit light rays in response to irradiation of the electron beam;

a selecting portion configured to select a first combination of a first anode voltage and a first element voltage to apply the first anode voltage to the anode electrode and apply the first element voltage to the electron emitting elements selectively, during a first period; [[and]]

a changing portion configured to change the first combination to a second combination of a second anode voltage and a second element voltage after the first period to apply the second anode voltage to the anode electrode and apply the second element voltage to the electron emitting elements selectively, during a second period, and change the second combination to the first combination after the second period; and

wherein the first and second periods are determined based on the first and second combinations respectively and are inverse proportional to an anode current flowing through the anode.

Claim 13 (Currently Amended): A system according to claim 12, wherein each of the electron emitting elements includes an element film and first and second electrodes opposing each other and disposed on the element film.

Claim 14 (Original): A system according to claim 12, wherein

the display apparatus further includes:

a plurality of scanning lines arranged parallel to each other on the first surface of the first substrate;

a plurality of modulation lines which intersect the scanning lines so as to be electrically insulated therefrom and are arranged parallel to each other, the electron emitting elements being provided at intersections of the scanning lines and the modulation lines, and the first and second electrodes being respectively connected to the scanning line and the modulation line.

Claim 15 (Original): A system according to claim 12, wherein the selecting portion includes:

a signal generator configured to generate a first scanning and modulating signal including the first element voltage, supply the first scanning and modulating signal to the scanning and modulation lines respectively, during a first period, generate a second scanning and modulating signal including the second element voltage and supply the second scanning and modulating signal to the scanning and modulation lines respectively, during a second period.

Claim 16 (Currently Amended): ~~A method~~ A system according to claim 15, further comprising an input portion configured to input a display signal to generate the scanning and modulation signal, wherein the first and second combinations are so set as to provide a substantially same luminance display condition with respect to the same display signal.

Claim 17 (Currently Amended): ~~A method~~ A System according to claim 12, further comprising a switching portion configured to switch a first power supply to a second power supply to generate the first combination.

Claim 18 (Currently Amended): ~~A method~~ A System according to claim 12, further comprising a switching portion configured to switch a second power supply to a first power supply to generate the first combinations.

Claim 19 (Canceled).

Claim 20 (Currently Amended): ~~A method~~ A system according to claim 12, wherein the changing portion gradually changes the first anode voltage to the second anode voltage and the first element voltage to the second voltage, and gradually changes the second anode voltage to the first anode voltage, and the second element voltage to the first voltage.

Claim 21 (Currently Amended): ~~A method~~ A system according to claim 12, wherein the changing portion includes an applying portion configured to apply an intermediate anode voltage between the first and second anode voltages to the anode and to apply an intermediate element voltage between the first and second element voltages to the electron emitting element during [[an]] a third period after the first period and during [[the]] a fourth period after the second period, respectively.

Claim 22 (Currently Amended): ~~A method~~ A system according to claim 12, wherein the first and second combinations cause the electron beams to be landed on first and second positions on the phosphor layer, respectively.

Claim 23 (New): A method of driving a display apparatus, the display apparatus including:

a first substrate having a first surface;

electron emitting elements, each configured to emit an electron beam, which are arranged on the first surface of the first substrate in a matrix form;

a second substrate having a second surface which faces the first surface with a gap therebetween;

an anode electrode formed at the second surface, and

a phosphor layer formed on the anode electrode, and configured to emit light rays in response to irradiation of the electron beam;

said display method comprising:

selecting a first combination of a first anode voltage and a first element voltage;

applying the first anode voltage to the anode electrode during a first period and applying the first element voltage to the electron emitting elements selectively during the first period;

changing the first combination to a second combination of a second anode voltage and a second element voltage;

applying the second anode voltage to the anode electrode during a second period and applying the second element voltage to the electron emitting elements selectively during the second period;

changing the second combination to the first combination after the second period; and

wherein changing the first combination includes gradually changing the first anode voltage to the second anode voltage, and the first element voltage to the second voltage, and changing the second combination includes gradually changing the second anode voltage to the first anode voltage, and the second element voltage to the first voltage.

Claim 24 (New): A method according to claim 23, wherein each of the electron emitting elements includes an element film and first and second electrodes opposing each other and disposed on the element film.

Claim 25 (New): A method according to claim 23, wherein the display apparatus further includes:

a plurality of scanning lines arranged parallel to each other on the first surface of the first substrate;

a plurality of modulation lines which intersect the scanning lines so as to be electrically insulated therefrom and are arranged parallel to each other, the electron emitting elements being provided at intersections of the scanning lines and the modulation lines, and the first and second electrodes being respectively connected to the scanning line and the modulation line.

Claim 26 (New): A method according to claim 23, wherein

said display method further comprising:

generating a first scanning and modulating signal including the first element voltage, and generating a second scanning and modulating signal including the second element voltage:

supplying the first scanning and modulating signal to the scanning and modulation lines respectively, during the first period; and

supplying the second scanning and modulating signal to the scanning and modulation lines respectively, during the second period.

Claim 27 (New): A method according to claim 26, further comprising inputting a display signal to generate the first and second scanning and modulation signals, wherein the first and second combinations are so set as to provide a substantially same luminance display condition with respect to the same display signal.

Claim 28 (New): A method according to claim 23, wherein changing the first combination includes switching a first power supply to a second power supply to generate the second combination.

Claim 29 (New): A method according to claim 23, wherein changing the second combination includes switching a second power supply to a first power supply to generate the first combination.

Claim 30 (New): A method according to claim 23, wherein changing the first combination includes applying an intermediate anode voltage between the first and second anode voltages to the anode and applying an intermediate element voltage between the first and second element voltages to the electron emitting element during an third period after the first period, and changing the second combination includes applying the intermediate anode voltage between the first and second anode voltages to the anode and applying the intermediate element voltage between the first and second element voltages to the electron emitting element during the fourth period after the second period.

Claim 31 (New): A method according to claim 23, wherein the first and second combinations cause the electron beams to be landed on first and second positions on the phosphor layer, respectively.

Claim 32 (New): A system for driving a display apparatus, comprising:

a first substrate having a first surface;

electron emitting elements, each configured to emit an electron beam, which are arranged on the first surface of the first substrate in a matrix form;

a second substrate having a second surface which faces the first surface with a gap therebetween;

an anode electrode formed at the second surface, and

a phosphor layer formed on the anode electrode and configured to emit light rays in response to irradiation of the electron beam;

a selecting portion configured to select a first combination of a first anode voltage and a first element voltage to apply the first anode voltage to the anode electrode and apply the first element voltage to the electron emitting elements selectively, during a first period; and

a changing portion configured to change the first combination to a second combination of a second anode voltage and a second element voltage after the first period to apply the second anode voltage to the anode electrode and apply the second element voltage to the electron emitting elements selectively, during a second period, and change the second combination to the first combination after the second period,

wherein the changing portion gradually changes the first anode voltage to the second anode voltage and the first element voltage to the second voltage, and gradually changes the

second anode voltage to the first anode voltage, and the second element voltage to the first voltage.

Claim 33 (New): A system according to claim 32, wherein each of the electron emitting elements includes an element film and first and second electrodes opposing each other and disposed on the element film.

Claim 34 (New): A system according to claim 32, wherein

the display apparatus further includes:

a plurality of scanning lines arranged parallel to each other on the first surface of the first substrate;

a plurality of modulation lines which intersect the scanning lines so as to be electrically insulated therefrom and are arranged parallel to each other, the electron emitting elements being provided at intersections of the scanning lines and the modulation lines, and the first and second electrodes being respectively connected to the scanning line and the modulation line.

Claim 35 (New): A system according to claim 32, wherein the selecting portion includes:

a signal generator configured to generate a first scanning and modulating signal including the first element voltage, supply the first scanning and modulating signal to the scanning and modulation lines respectively, during a first period, generate a second scanning and modulating signal including the second element voltage and supply the second scanning

and modulating signal to the scanning and modulation lines respectively, during a second period.

Claim 36 (New): A system according to claim 32, further comprising an input portion configured to input a display signal to generate the scanning and modulation signal, wherein the first and second combinations are so set as to provide a substantially same luminance display condition with respect to the same display signal.

Claim 37 (New): A system according to claim 32, further comprising a switching portion configured to switch a first power supply to a second power supply to generate the first combination.

Claim 38 (New): A system according to claim 32, further comprising a switching portion configured to switch a second power supply to a first power supply to generate the first combinations.

Claim 39 (New): A system according to claim 32, wherein the changing portion includes an applying portion configured to apply an intermediate anode voltage between the first and second anode voltages to the anode and to apply an intermediate element voltage between the first and second element voltages to the electron emitting element during a third period after the first period and during a fourth period after the second period, respectively.

Claim 40 (New): A system according to claim 32, wherein the first and second combinations cause the electron beams to be landed on first and second positions on the phosphor layer, respectively.